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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,281	08/27/2003	John Kurelek	PAT 53967-2	4441

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EXAMINER

SELF, SHELLEY M

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,281

Applicant(s)

KURELEK, JOHN

Examiner

Shelley Self

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/1/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the *second and third stick cylinder* (clm. 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 1 is objected to because of the following informalities: “pinned” (line 5) should be --pin--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. With regard to claims 3 and 5, neither the specification nor the drawings provide support for the details of a “...*double rod... cylinder...mounted between said hoist boom and said...push point*”. For example, it is unclear how the double (i.e., at least two) rods are both attached a push point.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to the claim 7, it is unclear what is meant by where it is pinned, i.e., it is unclear what “it” refers, to; the stick boom, proximal end, distal end or working

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tool. Likewise, references to "it", *so that it will operate* (line 28) and *to cause it to assist* (line 32) are also unclear. Clarification is required Examiner suggests, --said...--

The following limitations without proper antecedent bases:

"the angle" in (clm.7, lines 15, 19; clm. 8, lines 13, 16)

"the base end hydraulic port of said hoist cylinder" (lines 23, 24)

"the base end port of said second stick-located cylinder" (line 28)

"the rod end port" (line 31)

The claims should be reviewed for clarity and antecedent basis concerns.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 2 and claim 8 as best as can be understood are rejected under 35

U.S.C. 102(e) as being anticipated by Liu (6,763,863). Liu discloses a knuckle boom apparatus comprising: a machine base (1); a hoist boom (6) having a proximal end pivoted to the machine base, an a distal end remote therefrom; a stick boom (7) having a intermediate pivot pin pinned to the pivot on the distal end of the hoist boom (fig. 3), a distal end configured to carry a working tool (12) and a proximal end having a suitable cylinder push point (fig. 3); at least one hydraulic hoist cylinder (10) mounted between said hoist boom and said stick boom; at least one stick

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cylinder (16), a hydraulic reach cylinder (11) mounted above said hoist boom between said hoist boom and said suitable push point at said stick boom proximal end, whereby when said hydraulic reach cylinder is actuated by supplying oil to its base end, said distal end of said stick boom is withdrawn towards said machine base; and a hydraulic circuit for operatively supplying hydraulic oil to said hoist, stick and reach cylinders, wherein said hydraulic circuit comprises at least one hydraulic conduit line connecting respective base end ports of said hoist stick cylinders so as to allow hydraulic oil to shunt between base ends of said hoist and stick cylinders.

With regard to claims 2 and 8, Liu discloses a machine base, hoist boom stick boom a hydraulic hoist cylinder mounted beneath the hoist boom (10), a first stick/reach hydraulic cylinder mounted beneath said hoist (16; fig. 6, 7), a second stick/reach cylinder mounted above said hoist boom (11; fig. 6, 7), a hydraulic circuit (figs. 2, 4, 5, 8) with first and second directional control valves (21, 23, 25), wherein a base end hydraulic port of said first stick cylinder is connected via hydraulic conduit lines (101, 102, 13, 105, 105, 106).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6 as best as can be understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu (6,763,863) in view of Hudson (5,293,914). Liu does not disclose the second stick to be a double rod. Hudson teaches in a closely relate art the use of a double rod

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cylinder (fig. 1) in place of a single rod cylinder. The mere substitution of a double rod cylinder for that of a single rod cylinder or vice versa requires only routine skill in the art and would have been an obvious matter of design choice at the time the invention was made.

Further Hudson teaches that a double rod cylinder can be used in place of single rod cylinders. Because the references are from a similar art, it would have been obvious at the time of the invention to one having ordinary skill in the art to replace a Liu's single rod cylinder with a double rod cylinder for improved efficiency as taught by Hudson.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (571) 272-4524. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIE or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SSelf 
February 15, 2005



Lowell A. Larson
Primary Examiner